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REMARKS

Claims 1 and 10 have been amended. No new matter has been added. Support for the amendments can be found in the Specification at Paragraph 8 and in the Examples.

The rejection of claims 1 and 8 under 35 USC §102(b) as being anticipated by Silva is respectfully traversed. Silva requires a melting step whereby the tantalum-containing ore is melted in a high temperature furnace with CaF₂. The amount of CaF₂ used is described as the stoichiometric amount necessary for reacting with the Ta, Nb, Zr and Ti oxides which are present in the ore. Col. 2, lines 24-36. The Applicants' claimed invention does not require a melting stage to react the oxides first. Since the oxides in the ore are reacted before adding sulfuric acid, Silva does not teach or suggest making a slurry with a tantalum concentrate containing at least one of (Fe,Mn)(Ta,Nb)₂O₆, (Fe,Mn,Mg)(Nb,Ta)₂O₆, (Ca,Na)₂Ta₂O₆(O,OH,F) and NaTaO₃, a fluoride-containing compound, and sulfuric acid. Thus, the Applicants respectfully assert that the claimed invention is not anticipated by Silva.

The rejection of claims 1-2, 8 and 9 under 35 USC §103(a) as being unpatentable over Silva in view of Singh '459 is respectfully traversed. The Applicants reassert their above arguments with respect to Silva. In particular, Silva does not teach or suggest making a slurry with a tantalum concentrate containing at least one of (Fe,Mn)(Ta,Nb)₂O₆, (Fe,Mn,Mg)(Nb,Ta)₂O₆, (Ca,Na)₂Ta₂O₆(O,OH,F) and NaTaO₃, a fluoride-containing compound, and sulfuric acid. In addition, because Silva reacts CaF₂ with the ore in a high temperature melting stage, the Applicants respectfully assert that one skilled in the art would not have been motivated to substitute the ammonium bifluoride of the low-temperature, wet process of Singh for the CaF₂ in the dry, high-temperature melting stage of Silva. Usefulness in one chemical process does not imply usefulness in a very different chemical process. Thus, the Applicants respectfully assert that the claimed invention is not obvious in view of Silva and Singh '459.

The rejection of claims 1, 3, 4, 10 and 12 under 35 USC §103(a) as being unpatentable over Silva in view of Pierret is respectfully traversed. The Applicants reassert their above arguments with respect to Silva. In particular, Silva does not teach or suggest making a slurry with a tantalum concentrate containing at least one of (Fe,Mn)(Ta,Nb)₂O₆, (Fe,Mn,Mg)(Nb,Ta)₂O₆, (Ca,Na)₂Ta₂O₆(O,OH,F) and NaTaO₃, a fluoride-containing compound, and sulfuric acid. Thus, the Applicants respectfully assert that the claimed invention is not obvious in view of Silva and Pierret.

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The rejection of claim 6 under 35 §USC 103(a) as being unpatentable over Silva in view of Pierret and in further view of Singh '146 is respectfully traversed. The Applicants reassert their above arguments with respect to Silva. In particular, Silva does not teach or suggest making a slurry with a tantalum concentrate containing at least one of (Fe,Mn)(Ta,Nb)₂O₆, (Fe,Mn,Mg)(Nb,Ta)₂O₆, (Ca,Na)₂Ta₂O₆(O,OH,F) and NaTaO₃, a fluoride-containing compound, and sulfuric acid. Thus, the Applicants respectfully assert that the claimed invention is not obvious in view of Silva, Pierret and Singh '146.

The rejection of claims 5 and 11 under 35 USC 103(a) as being unpatentable over Silva in view of Pierret and in further view of Singh '459 is respectfully traversed. The Applicants reassert their above arguments with respect to Silva. In particular, Silva does not teach or suggest making a slurry with a tantalum concentrate containing at least one of $(Fe,Mn)(Ta,Nb)_2O_6$, $(Fe,Mn,Mg)(Nb,Ta)_2O_6$, $(Ca,Na)_2Ta_2O_6(O,OH,F)$ and $NaTaO_3$, a fluoride-containing compound, and sulfuric acid. In addition, because Silva reacts CaF_2 with the ore in a high temperature melting stage, the Applicants respectfully assert that one skilled in the art would not have been motivated to substitute the ammonium bifluoride of the low-temperature, wet process of Singh for the CaF_2 in the dry, high-temperature melting stage of Silva. Usefulness in one chemical process does not imply usefulness in a very different chemical process. Thus, the Applicants respectfully assert that the claimed invention is not obvious in view of Silva, Pierret and Singh '459.

The rejection of claim 7 under 35 USC §103(a) as being unpatenable over Silva in view of Pierret, Singh '459 and Singh '146 is respectfully traversed. The Applicants reassert their above arguments with respect to Silva. In particular, Silva does not teach or suggest making a slurry with a tantalum concentrate containing at least one of (Fe,Mn)(Ta,Nb)₂O₆, (Fe,Mn,Mg)(Nb,Ta)₂O₆, (Ca,Na)₂Ta₂O₆(O,OH,F) and NaTaO₃, a fluoride-containing compound, and sulfuric acid. In addition, because Silva reacts CaF₂ with the ore in a high temperature melting stage, the Applicants respectfully assert that one skilled in the art would not have been motivated to substitute the ammonium bifluoride of the low-temperature, wet process of Singh for the CaF₂ in the dry, high-temperature melting stage of Silva. Usefulness in one chemical process does not imply usefulness in a very different chemical process. Thus, the Applicants respectfully assert that the claimed invention is not obvious in view of Silva, Pierret, Singh '459 and Singh '146.

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In view of the foregoing amendment, it is believed that the Examiner's rejections have been overcome and that the application is in condition for allowance. Such action is earnestly solicited.

Respectfully submitted,

/RFClark/

Robert F. Clark Reg. No. 33,853

OSRAM SYLVANIA Inc. 100 Endicott St. Danvers, MA 01923